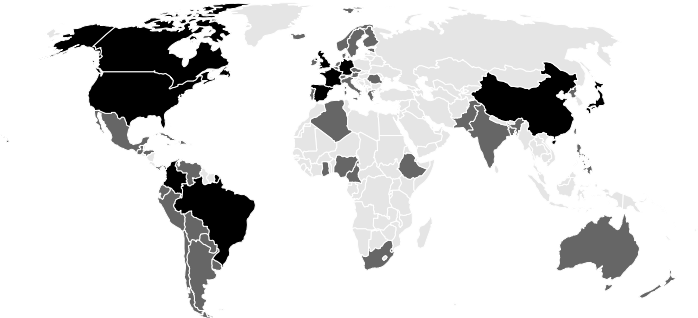


‘The most demography thing ever’

A database of Covid-19 cases and deaths by age and sex

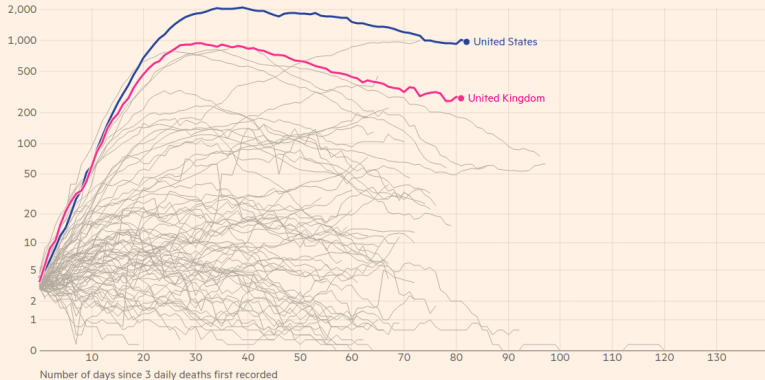
Tim Riffe, Enrique Acosta, ...





New deaths attributed to Covid-19 in United States and United Kingdom

Seven-day rolling average of new deaths, by number of days since 3 average deaths first recorded



Source: FT analysis of data from the European Centre for Disease Prevention and Control and the Covid Tracking Project. Data updated June 4 2020 3.27pm BST

Financial Times, John B. Murdoch <https://ig.ft.com/coronavirus-chart>



Monica Alexander

@monjalexander



A lot of my feed right now is different modeling takes for COVID-19 but one thing that sticks out is the demographers en masse yelling "YES BUT HAVE YOU CONSIDERED THE POPULATION AGE STRUCTURE" which is the most demography thing ever

3:06 PM · Mar 15, 2020 · [Twitter for iPhone](#)

26 Retweets **201** Likes

NEW RESEARCH IN

Physical Sciences

Social Sciences

BRIEF REPORT



Demographic science aids in understanding the spread and fatality rates of COVID-19







Jennifer Beam Dowd, Lilliana Andriano, David M. Brazel, Valentina Rotondi, Per Block, Xuejie Ding, Yan Liu, and Melinda C. Mills

PNAS May 5, 2020 117 (18) 9696-9698; first published April 16, 2020 <https://doi.org/10.1073/pnas.2004911117>

Edited by Douglas S. Massey, Princeton University, Princeton, NJ, and approved April 8, 2020 (received for review March 17, 2020)

[Comment on this paper](#)

Monitoring trends and differences in COVID-19 case fatality rates using decomposition methods: Contributions of age structure and age-specific fatality

 Christian Dudel,  Tim Riffe,  Enrique Acosta,  Alyson A. van Raalte,  Cosmo Strozza,  Mikko Myrskylä

doi: <https://doi.org/10.1101/2020.03.31.20048397>

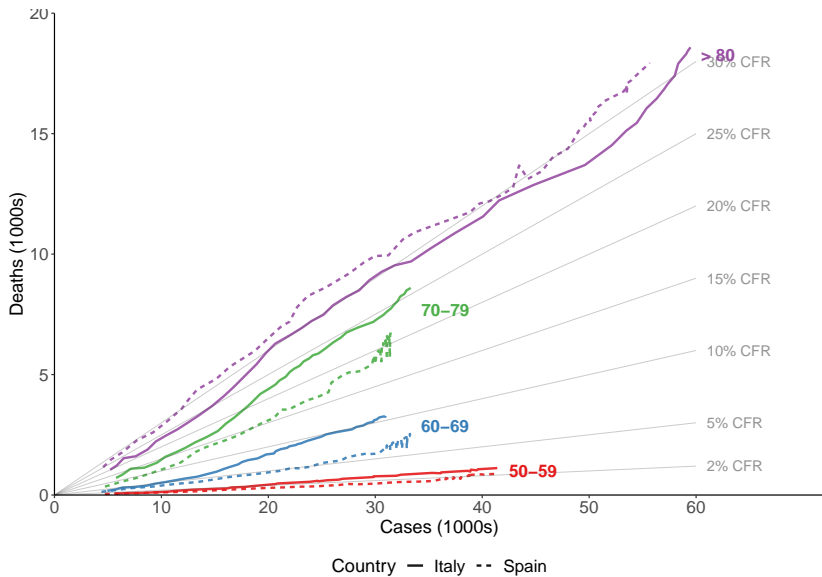
(first git commit March 23)

Database spinoff, April 5

Database spinoff, April 5

2 months ago!





COVerAGE-DB

A central repository of **harmonized measures** (counts) by **sex** and **harmonized age groups** (5 or 10 years).

- ▶ Confirmed cases and deaths
- ▶ Tests
- ▶ Daily or weekly time series

Status

- ▶ In open development, not *launched*
- ▶ Available on github
https://www.github.com/timriffe/covid_age
- ▶ Mirrored to OSF <https://osf.io/mpwjq/>

What can you do with it?

medRxiv

THE PREPRINT SERVER FOR HEALTH SCIENCES



Cold
Spring
Harbor
Laboratory

BMJ Yale

[HOME](#) | [AB](#)

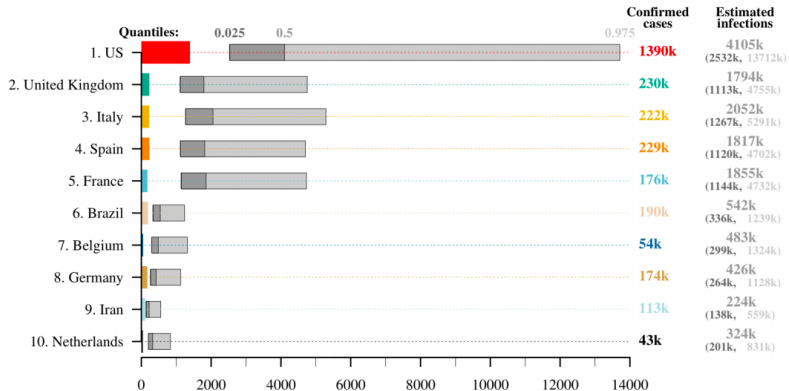
A demographic scaling model for estimating the total number of COVID-19 infections

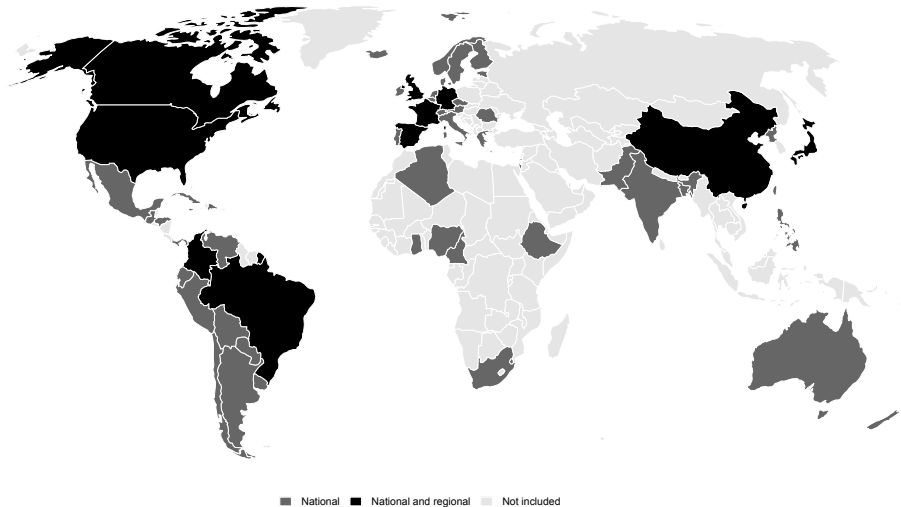
[Comment on this paper](#)

Christina Bohk-Ewald, Christian Dudel, Mikko Myrskylä

doi: <https://doi.org/10.1101/2020.04.23.20077719>

Confirmed cases vs estimated infections, in thousand, as of May 13, 2020





Availability dashboard: https://timriffe.github.io/covid_age/DataAvail

A great team!

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► **How about you?**

Toolkit

- ▶ Data input in Drive
- ▶ Production in R
- ▶ Distribution in github and OSF

Outlook

- ▶ fill gaps
- ▶ improve harmonization methods
- ▶ improve access + usability
- ▶ expand measures
 - ▶ seroprevalence
 - ▶ synthetic measures
 - ▶ smoothed and interpolated measures
 - ▶ indirect measures (infections + IFR)

Other relevant databases

- ▶ INED Demographics of COVID-19 deaths
<https://dc-covid.site.ined.fr/en/>
- ▶ GlobalHealth5050 <https://globalhealth5050.org/covid19/>
- ▶ European CDC
<https://covid19-surveillance-report.ecdc.europa.eu/>
- ▶ ...
- ▶ STMF www.mortality.org
- ▶ Eurostat demo_r_mweek3 dataset
- ▶ Hopkins <https://github.com/CSSEGISandData/COVID-19>
- ▶ Our World in Data testing data
<https://ourworldindata.org/coronavirus-testing>

